2009 ADDENDUM TO THE FACT SHEET FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. WA0020320

I. GENERAL INFORMATION

Facility: City of Kalama Wastewater Treatment Plant
206 Hendrickson Drive
Kalama, WA 98625

II. APPLICATION REVIEW

The city of Kalama submitted an application to Ecology on August 7, 2008, and September 2, 2008, for permit reissuance, and Ecology accepted it on September 12, 2008. Ecology has sufficiently reviewed the application, discharge monitoring reports, and other facility information in enough detail to ensure that:

- The city of Kalama has complied with all of the terms, conditions, requirements and schedules of compliance of the expired permit.
- Ecology has up-to date information on the waste treatment practices and the nature, content, volume, and frequency of its discharge.
- The discharge meets applicable effluent standards and limits, water quality standards, and other legally applicable requirements.

III. PERMIT REAUTHORIZATION

When Ecology reauthorizes a discharge permit it essentially reissues the permit with the existing limits, terms and conditions. Alternatively, when Ecology renews a permit it re-evaluates the impact of the discharge on the receiving water which may lead to changes in the limits, terms and conditions of the permit.

This fact sheet addendum accompanies the permit, which Ecology proposes to reauthorize for the discharge of wastewater to the Columbia River. The previous fact sheet explains the basis for the discharge limitations and conditions of the reauthorized permit and remains as part of the administrative record.

Ecology determined it does not need to change the existing permit requirements, including discharge limits and monitoring, to protect the receiving water receiving quality. The previous fact sheet addressed conditions and issues at the facility at the time when Ecology issued the previous permit in 2004. Since the issuance of the current permit, Ecology has not received any additional information which indicates that environmental impacts from the discharge warrant a complete renewal of the permit. The reauthorized permit is virtually identical to the previous permit issued on June 28, 2004.

Ecology reviewed inspections and assessed compliance of the The city of Kalama discharge with the terms and conditions in the previous permit and determined that it should not rank the facility as a high priority for permit renewal. Ecology assigns a high priority for permit renewals in situations where water quality would benefit from a more stringent permit during the next five-year cycle.

The permit reauthorization process, along with the renewal of high priority permits, allows Ecology to reissue permits in a timely manner and minimize the number of active permits that have passed their expiration dates. For permit reissuance planning purposes, Ecology follows a system of ranking that considers the benefit gained by renewing a permit rather than reauthorizing a permit during its annual permit planning process. Ecology assesses each permit that is expiring and due for reissuance and compares it with other permits due for reissuance. Ecology notifies the public and seeks input after it has tentatively established the initial draft ranking of the permits it plans to renew and those it plans to reauthorize. Ecology considers all relevant comments and suggestions before it makes a final decision.

Ecology carried over the discharge limits and conditions in effect at the time of expiration of the previous permit to this reauthorized permit. Ecology only changed the submittal dates for reports from those in the previous permit. Ecology removed the completed report requirements that do not require additional or continued assessment. It adjusted the dates for the other standard compliance and submittal requirements that it carried over from the past permit into this reauthorized permit. Ecology considered these reports necessary in the previous permit and no information has come forward to cause it to reconsider.

Ecology must public notice the availability of the draft reauthorized permit at least 30 days before it reissues the permit [Washington Administrative Code (WAC) 173-220-050]. Ecology invites you to review and comment on its decision to reauthorize the permit (see Appendix B-Public Involvement for more detail on the Public Notice procedures).

After the public comment period has closed, Ecology will prepare a response to comments document that it will attach to this fact sheet addendum. The response to comments will include the resultant changes to the permit and either address each comment individually or summarize the substantive comments and respond. Ecology sends a copy of the response to comments to all parties who submitted comments. Ecology will include the response to comments in this fact sheet addendum.

IV. RECOMMENDATION FOR PERMIT ISSUANCE

Ecology proposes to reissue this permit for five years.

APPENDIX A—TEMPERATURE ANALYSIS

The dilution factors of effluent to receiving water that occur within the allowed mixing zones have been determined at the critical condition by the use of the visual plumes dilution model (G&O, 2002 Appendix C). The dilution factors have been determined to be: Acute 23:1, Chronic 79:1.

The prior fact sheet lists the 90th percentile ambient temperature over the critical season is 21.3C. The Water Quality criteria for the Columbia River is under Chapter 173-201A is higher than any other fresh water river at 20°C, and the temperature criteria of 18°C was also evaluated.

Using the spreadsheet designed for permit limit analysis shows there is no reasonable potential for violation of water quality criteria, or for degradation of the ambient environment during the term of the next permit.

T-MIX FRESH 8-30-08 a spreadsheet for calculating reasonable potential and limits for temperature
T-MixFresh is based on WAC 173-201A-200(1)(c)(i)--(ii) and Water Quality Program Guidance.
Developed by Eric Schlorff and Laura Fricke (2008)
All Data inputs must meet WQ guidelines.

The Water Quality temperature guidance document may be found at: http://www.ecy.wa.gov/biblio/0610100.html

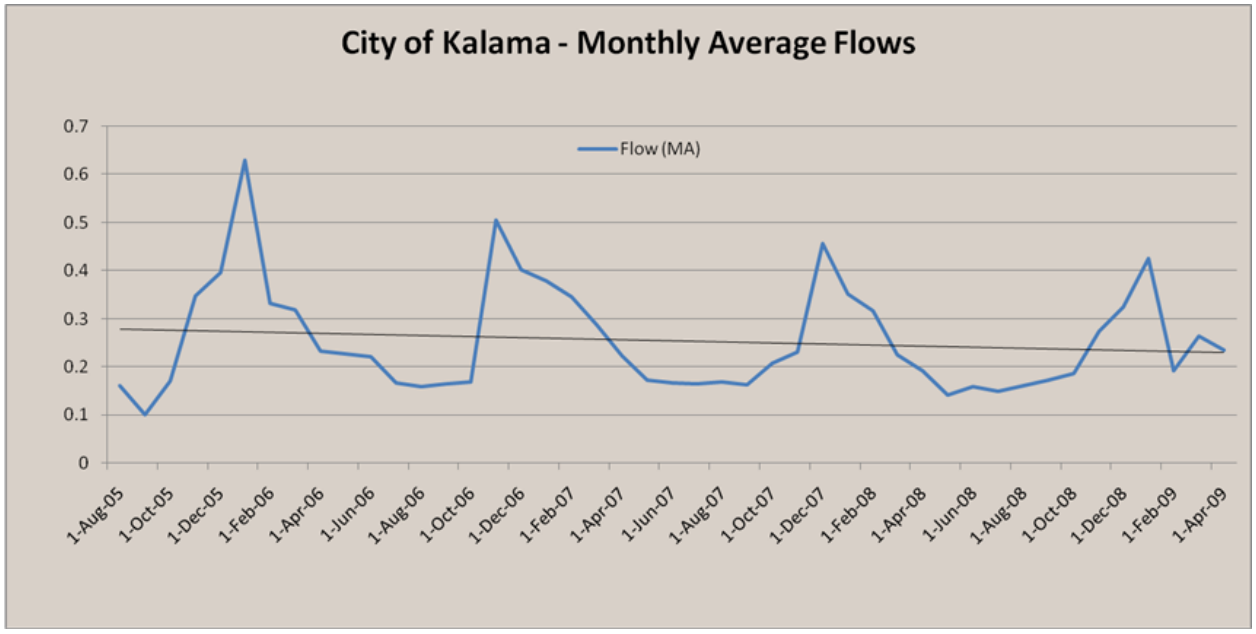
Notes:

	Core Summer Critera	Supplemental Criteria
INPUT	July 1-Sept 14	Sept 15-July 1
1. Chronic Dilution Factor at Mixing Zone Boundary	79.0	79.0
2. 7DADMax Ambient Temperature (T) (Upstream Background 90th percentile)	21.2 °C	19.2 °C
3. 7DADMax Effluent Temperature (95th percentile)	24.0 °C	22.0 °C
4. Aquatic Life Temperature WQ Criterion in Fresh Water	20.0 °C	18.0 °C
OUTPUT		
5. Temperature at Chronic Mixing Zone Boundary:	21.2 °C	19.2 °C

6. Incremental Temperature Increase or decrease:	0.0 °C	0.0 °C
7. Incremental Temperature Increase 28/(T+7) if T≤ criteria:	---	---
8. Maximum Allowable Temperature at Mixing Zone Boundary:	21.5 °C	19.5 °C
A. If ambient temp is warmer than WQ criterion		
9. Does temp fall within this warmer temp range?	YES	YES
10. Temp increase allowed at mixing zone boundary, if required:	NO LIMIT	NO LIMIT
B. If ambient temp is cooler than WQ criterion but within 28/(T_{amb}+7) and within 0.3 °C of the criterion		
11. Does temp fall within this incremental temp. range?	---	---
12. Temp increase allowed at mixing zone boundary, if required:	---	---
C. If ambient temp is cooler than (WQ criterion-0.3) but within 28/(T_{amb}+7) of the criterion		
13. Does temp fall within this Incremental temp. range?	---	---
14. Temp increase allowed at mixing zone boundary, if required:	---	---
D. If ambient temp is cooler than (WQ criterion - 28/(T_{amb}+7))		
15. Does temp fall within this Incremental temp. range?	---	---
16. Temp increase allowed at mixing zone boundary, if required:	---	---
17. Do any of the above cells show a temp increase?	**NO**	**NO**

18. Temperature Limit if Required?	**NO LIMIT**	**NO LIMIT**

Summer flows have shown no appreciable increase over the last four years, and the peak flow months have declined each successive year from 2005 (2006, 2007, and 2008) with 2009 peak flows yet to come. Peak day flows are difficult to evaluate since there is not good confidence that data before the last plant upgrade was providing accurate daily flow data.



APPENDIX B--PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to reissue a permit to The city of Kalama. The permit includes wastewater discharge limits and other conditions. This fact sheet addendum describes the facility and Ecology's reasons for reauthorizing the permit conditions.

Ecology placed a Public Notice of Application on June 4, 2009, and June 11, 2009, in the *Daily News* to inform the public about the submitted application and to invite comment on the reissuance of this permit.

Ecology will place a Public Notice of Draft on August 10, 2009, in the *Daily News* to inform the public and to invite comment on the proposed draft National Pollutant Discharge Elimination System permit and fact sheet addendum.

The Notice –

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website.).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed NPDES Permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled **Frequently Asked Questions about Effective Public Commenting** which is available on our website at http://www.ecy.wa.gov/biblio/0307023.html.

You may obtain further information from Ecology by telephone, 360-407-6279, or by writing to the permit writer at the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

The primary author of this permit and fact sheet is Carey Cholski.

APPENDIX C—RESPONSE TO COMMENTS

Ecology received comments from the city of Kalama (City) on September 2, 2009, and September 18, 2009.

Comment 1:

We are requesting that ne proposed testing requirements S2.A, S8.A, and S9.A be deleted from the final permit.

The POTW receives very minimal amounts of industrial waste (saw cooling water form a lumber mill). The additional testing would cost the City a minimum of $12,000 which could be better spent elsewhere. The money could be better used for other pollution prevention activities.

Response 1:

The new monitoring requirements in S2.A are required of all NPDES Permit applicants of the type and size of Kalama. However, Ecology has modified the monitoring requirements to reduce the financial impact on the City. The City may also request a waiver of the WET testing, and Ecology will grant the waiver, provided that the City:

- Monitor for ammonia and ammonia levels remain below 10 mg/L; and
- The City demonstrates compliance with pretreatment section S6, in particular subsections C1 and C2.

Ecology typically does not see evidence of toxicity in municipal wastewater when ammonia concentrations are below 10 mg/L.

Comment 2:

Delete "(new and expanded with anoxic selectors)" from the plant description on permit page 1.

Response 2:

Ecology has deleted this section.

Comment 3:

For S10, second bullet, can Ecology accept a marked up copy of a USGC map and a scale drawing of the diffuser to satisfy the requirement of "A scale diagram(s) of the outfall

area showing the river banks, river width, and outfall line, how far it extends into the river and the details of the diffuser array?"

Response 3:

Yes, this would generally be what we are seeking.

Comment 4:

For S10 sixth bullet, can Ecology accept flow data from the nearest USGS gauging station for "A graph of the flow velocity of the Columbia River at the outfall over the 24-hour period that encompasses the period when the inspection is being performed (shows river flows as negative values)?

Response 4:

There is no gauging station that is that close, however, for purposes of this study, the City may use the average flow velocity and direction between the St. Helens (~8 miles upstream) and Longview (~8 miles downstream) gauging stations of the USGS after adjusting for tidal lag time between the two points. Links: http://www.nwrfc.noaa.gov/river/station/flowplot/flowplot.cgi?SHNO3 and http://www.nwrfc.noaa.gov/river/station/flowplot/flowplot.cgi?LOPW1.

Comment 5:

The City would like to meet about these items.

Response 5:

Ecology's permit writer (Dave Knight) discussed these issues with Mr. McCrary, Public Works Director.